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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/043,215	01/14/2002	Sumitaka Tatsuta	8015-1001	6209	
466	7590 05/15/2003				
YOUNG & THOMPSON			EXAM	INER	
	23RD STREET 2ND FL N, VA 22202	OOR	CHOWDHURY, TA	HURY, TARIFUR RASHID	
		,'	ART UNIT	PAPER NUMBER	
			2871	· · · · · · · · · · · · · · · · · · ·	

Please find below and/or attached an Office communication concerning this application or proceeding.

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		Applicati n N .	Applicant(s)			
Office Action Summary		10/043,215	TATSUTA ET AL.			
		Examiner	Art Unit			
		Tarifur R Chowdhury	2871	_		
The M. Period for Reply	AILING DATE of this communication app	ears on the cov r sheet with the c	orrespondence address			
THE MAILING - Extensions of tin after SIX (6) MO - If the period for r - If NO period for r - Failure to reply w - Any reply receive earned patent ter	ED STATUTORY PERIOD FOR REPLY BY DATE OF THIS COMMUNICATION. The may be available under the provisions of 37 CFR 1.13 MTHS from the mailing date of this communication. The provisions of 37 CFR 1.13 period above is less than thirty (30) days, a reply reply is specified above, the maximum statutory period work within the set or extended period for reply will, by statute, and by the Office later than three months after the mailing rm adjustment. See 37 CFR 1.704(b).	16(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) day fill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
Status	· · · · · · · · · · · · · · · · · · ·					
· <u> </u>	nsive to communication(s) filed on					
<u> </u>	,—	is action is non-final.	recognition as to the morits is			
3) Since closed Disp sition of C	this application is in condition for allowa in accordance with the practice under a laims	Ex parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.			
•	s) 1-11 is/are pending in the application					
•	ne above claim(s) is/are withdrav					
	s) is/are allowed.					
	Claim(s) <u>1-11</u> is/are rejected.					
7)☐ Claim(s	Claim(s) is/are objected to.					
8) ☐ Claim(s	s) are subject to restriction and/or	r election requirement.				
Application Pap	ers	•				
/ '	cification is objected to by the Examine					
10)☐ The draw	wing(s) filed on is/are: a)□ accep	oted or b) objected to by the Exa	miner.			
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11) The proposed drawing correction filed on is: a) □ approved b) □ disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
·—	n or declaration is objected to by the Ex	aminer.				
•	5 U.S.C. §§ 119 and 120		\			
•	vledgment is made of a claim for foreigr	n priority under 35 U.S.C. § 119(a	a)-(a) or (t).			
/—	Some * c) None of:					
	1. Certified copies of the priority documents have been received.					
	 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage 					
	Copies of the certified copies of the prior application from the International Bu attached detailed Office action for a list	reau (PCT Rule 17.2(a)).				
14) Acknowle	edgment is made of a claim for domesti	c priority under 35 U.S.C. § 119(e) (to a provisional application).			
, —	e translation of the foreign language pro edgment is made of a claim for domest	• •				
Attachment(s)						
2) Notice of Draft	rences Cited (PTO-892) sperson's Patent Drawing Review (PTO-948) sclosure Statement(s) (PTO-1449) Paper No(s) _	5) Notice of Informal	y (PTO-413) Paper No(s) Patent Application (PTO-152)			
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DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Objections

2. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 8 (second occurrence), 9 and 10 have been renumbered as 9, 10 and 11 respectively.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

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the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

- 6. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al., (Takahashi), US 2003/0025856 in view of applicant's admitted prior art (AAPA).
- 7. Takahashi discloses a transmittable light scattering sheet (applicant's optical diffusing element) composed of a plurality of polymers (self-fused together) varying in refractive index (page 13, claim 1)

Takashi differs from the claimed invention because he does not explicitly disclose that the polymer particles having a refractivity varying from the center to the periphery thereof.

The AAPA described in the present application discloses that a light diffusion element having fine particle with uniform distribution of refraction, namely a refractivity varying from the center to the periphery, is used for the purpose of using not scattering of light but refraction of light and thus provide secured optical diffusibility while providing somewhat less back scattering (pages 2-3).

The AAPA is evidence that ordinary workers in the art would find a reason,

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suggestion or motivation to use a light diffusion element having fine particle with uniform distribution of refraction, namely a refractivity varying from the center to the periphery.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the diffusing element of Takahashi such that use a light diffusion element having fine particles with uniform distribution of refraction, namely a refractivity varying from the center to the periphery so that secured optical diffusibility and less back scattering is obtained, as per the teachings of the AAPA.

Accordingly, claim 1 would have been obvious.

As to claims 6 and 11, Takahashi discloses the use of the diffusing element in a reflection type liquid crystal display such that the diffusing element is formed within the liquid crystal cell (page 14, claims 22-23).

As to claims 2 and 7, Takahashi also discloses that the glass transition temperature of the polymers can be selected within the range of about -100° C to 250°C (overlaps the claimed temperature).

As to claims 3 and 8, Takahashi discloses that a transparent layer is in contact with one of the opposite surfaces of the layer of the polymer particles (page 8, paragraph 0081).

As to claims 4 and 9, applicant is claiming the product (a device) including a method (i.e. a process) of forming the transparent layer by dry-laminating method.

Therefore, claims 9 and 10 are considered as "product-by-process" claims. In spite of the fact that a product-by-process claim may recite only process limitations, it is the product, which is covered by the claim and not the recited process. Further, patentability

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of a claim to a product does not rest merely on a difference in the method by which the product is made. Rather, it is the product itself, which must be new and unobvious (See MPEP sec 806.05(f)). Further, using a dry-laminating method to form transparent layer is common and known in the art and thus would have been obvious to avail a proven technique.

As to claims 5 and 10, Takahashi discloses that the polymer particles have a mean particle size between approximately 0.1 to 20 μ m (page 7, paragraph 0070).

Conclusion

- 8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - a) US 2002/0012086 is related to transmittable light scattering sheets.
- b) US 6,424,395 is related to a light scattering film including a plurality of first transparent regions each having a fibril-like cross section, and a plurality of second transparent regions differing in refractive index range from the first transparent region.
- c) USPAT 6,268,961 is related to optical films having at least one particlecontaining layer.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tarifur R Chowdhury whose telephone number is (703) 308-4115. The examiner can normally be reached on M-Th (6:30-5:00) Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William L Sikes can be reached on (703) 305-4842. The fax phone numbers for the organization where this application or proceeding is assigned are (703)

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746-7005 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

TRC May 13, 2003 T. Chowdhury

Primary Examiner

Technology Center 2800